

Principal Investigator (Last, First, Middle) Gallagher, Jane Elizabeth

BIOGRAPHICAL SKETCH

Name	Position Title
Gallagher, Jane, E.	Health Research Scientist

EDUCATION/TRAINING			
Institution and Location	Degree	Year	Field of Study
State University of NY Potsdam	BS	1976	Biology/Chemistry
Purdue University W.Lafayette n	MS	1981	Civil Engineering (Env.Engineering)
U. Of Utah, SLC City, Utah	MS	1982	Public Health
U. Of NC, Chapel Hill, NC	Ph.D.	1986	Env. Toxicology

PROFESSIONAL EXPERIENCE

1987-Present Health Research Scientist, Epidemiology Biomarker, Branch Human Studies Division, NHEERL, US EPA RTP, NC
1999-present Adjunct Asst. Professor - UNC School of Public Health- Environmental Sciences and Engineering
1986-1987 National Research Council (NRC) postdoctoral fellow
1982-1986 Biologist, Laboratory of Pulmonary Pathobiology, National Institute Environmental Health Sciences (NIEHS RTP, NC).
1981- Consultant Wastewater Engineering, General Motors Corp. Massena, NY
1981- 1982 NIOSH traineeship Rocky Mountain Center for Occupational Medicine, Salt Lake City Utah
1979-1981 Research and teaching assistant. Environmental Engineering-Dept of Civil Engineering, Purdue University W. Lafayette IN.
1976-1979 Laboratory Supervisor, General Motors Corporation, Chevrolet Division, Massena, NY

SELECTED AWARDS AND HONORS

Special Act Award for exceptional mentoring of EPA pos-docs 2005
Special Act Award- Lead Principal Investigator- for preparation of proposal in response to ORD Computational Toxicology RFA 2005.
Special Act Team Award- 2004 Participation of Clinical Asthma Panel studies-for application in larger field studies
Special Act Team Award- 2003 Participation in Biomarker Field Study-Fallon Nevada
NHEERL Community Service 2003
Award Office of Research and Development-USEPA Diversity Award 2002
Special Act Award- for Coordination of Biomarker Analysis EPA-CZECH. Republic Studies
Science and Technology Achievement Awards (2) 1994

INVITED LECTURES/SYMPOSIA

“Mechanistic Indicators of Childhood Asthma-A Computational Toxicology Study” US/Canadian Research Studies Workshop. Detroit Michigan October 21, 2005.
“Integrating Biomonitoring Data into Risk Assessment” 31st Annual Meeting of The Toxicology Forum at the Given Institute Aspen, Colorado July10-14, 2005.
Office of Children’s Health Protection, Washington, DC “Mechanistic Indicators of Childhood Asthma”,2005.
Society of Toxicology Annual Meeting- National Children Study symposium “Validation of non-invasive Biological Sources for Application in Environmental Epidemiology Studies” Baltimore, MD. 2004.
Adjunct Asst Professor- Lecturer for graduate level classes
Invited Speaker: Society of Toxicology- National Children Study symposium “Validation of non-invasive

Biological Sources for Application in Environmental Epidemiology Studies" 2004.

Invited Speaker: ORD/Regional- "Biomarkers Approaches/Cumulative Risk Assessment/State of the Science"-Cumulative Risk workshop-2002.

Invited Speaker: Local Community- "Approaches for Assessing Exposures from Multiple Facilities" 2002

Invited Speaker: National Children Studies-"Non-invasive Samples for Gene/Environmental Studies" 2002, 2003

I Invited Speaker: Maximum Allowable Conc. Workshop-Munich, Germany "Animal to Human extrapolation" 2001

Invited speaker: local SOT 2001- "Interfacing Toxicology and Epidemiology through Biomarker Development"

Invited speaker: PM Conference "Air pollution Particles: physicochemical properties, DNA damage, and detection in human and canine tissue" 2000

Invited Speaker: RJ Lee INC Pittsburg PA: "Health Effects Indicators in Human Lung in Relation to Metal Content Particle Number" 2000.

Invited Speaker: ORD Workshop "Community Assessment through Biomarkers and Standard Mortality Records" -RTP-NHEERL 99.

ASSISTANCE/LEADERSHIP PROVIDED TO THE SCIENTIFIC COMMUNITY

Editorial Board: Mutation Research 2000- present

Journal Reviewer: Toxicology Appl Pharmacology, Environmental Health Perspectives, Carcinogenesis, Cancer, Epidemiology Biomarkers and Prevention, J. of Toxicology and Environmental Health.

Environmental Mutagen Society

Scientific Mentor: To Recent Graduate Student Service Contracting Authority 2003-2004

Adjunct Asst Professor: Lecturer for graduate level classes

Assistance/Training: NC Department of Environmental and Natural Resources (To Coordinator-Chemical Accident Prevention, Division of Air Quality)- Use of Risk Screening Environmental Indicator Model

Assistance/Training: NC Department of Crime and Public Safety Division of Emergency Management

Training/oversight/assistance: major professors (NCCU and NCSU)-related to graduate student air pollution graduate and undergraduate research projects.

Research Triangle Scientist-Teacher Partnership Participant

Health Professional Partnership-UNC, NC (A mentoring program for instilling scientific interest to under-represented minorities) 2000-2003.

Coordinator: Science Fair Judges for elementary and middle school (local).

Dissertation advisor: two NCCU master students 1999-2002.

Dissertation Committee member: Andrew Linstrom, Environmental Science and Engineering School of Public Health UNC at Chapel Hill 1997

Expert Panel Member: Workshop on Toxicological Significance of DNA adducts Regulatory Toxicology and Pharmacology Boca Raton Fla. 1995

IARC Invited speaker participant-DNA adduct workshop participant/speaker-Lyon France-1993

ASSISTANCE/LEADERSHIP PROVIDED TO THE AGENCY

Topic Lead:Office of Research and Development (ORD) Human Health Risk Review- "Oxidative Stress"- 2005

Assistance: Office of Science Policy, US EPA-CRISP Computer Retrieval of Information on Scientific Projects- 2004

Assist-Planning of a jointly EPA/Industry(ILSI) sponsored Biomarker Workshop 2004.

Co-chair- Session for Cumulative Risk Assessment Regional Assessment /ORD workshop Dallas, Tx. Nov 3-7, 2002

Participated in writing chapter for NHEERL - Human Health Risk Assessment Strategy Document

National Center for Environmental Research-Reviewer for EPA's Star Grant Biomarker Proposals-2003

World Health Organization- Reviewer-^{NO2}-PAH document 2003

Region 10 US EPA - Interface/assist Liaison for ORD Office of Science Policy 2003-2004

Committee organizer-NHEERL Annual Symposium 1998: "Extrapolation in Human Health and Ecological Risk Assessment"

PUBLICATIONS (selected publications of total 38 peer reviewed articles and book chapters)

Kim, S.J., Dix, D.J., Thompson, K.E., Murrell, R.N., Schmid, J.E., **Gallagher, J.E.**, and Rockett, J.C. Gene expression in unstaged head hair follicles plucked from men and women. In press 2006 *Annals of Clinical Lab Science*

Gallagher J., R. Sams II, J. Inmon , R. Gelein, A. Elder , G. Oberdorster , and A. K. Prahalad 2003 Formation of 8-oxo-dG in rat lung following subchronic inhalation of carbon black *Toxicol Appl Pharmacol.* Aug 1;190(3):224-31.

Becker S., Soukup J., **Gallagher, J.** 2002 Differential particulate air pollution induced oxidant stress in human granulocytes, monocytes and alveolar macrophages. *In vitro Toxicology*

Prahalad AK , Inmon J., Dailey L, Madden M , Ghio, A. **Gallagher J.**2001 Air pollution mediated oxidative DNA damage in cell free systems and Human Airway Epithelial cells in relation to particle metal content and bioreactivity *Chemical Research and Toxicology*

AK Prahalad, J. Soukup, J. Inmon, R. Willis, A J. Ghio, S. Becker and **J.Gallagher**_1999. Ambient Air Particles: Effects on cellular oxidant radical generation in relation to particulate elemental chemistry, *Toxicology and Applied Pharmacology*: 158: 81-91

A. K. Prahalad, D. K. Manchester, I. C. Hsu, J. Inmon, **J. E. Gallagher** 1999 Human placental microsomal activation and DNA adduction by air pollutants, *Environ.Contam. Toxicol* 62:93-100

Madden M and **Gallagher J.E.** 1999 Biomarkers of Exposure In: *Air Pollution and Health* St. Holgate, HS Koren, J. Samet and R. Maynard, eds Academic Press London 417-430

Fennel T., **Gallagher, J.** Gorelick, N., Swenberg, J. 9 (1996) Toxicological Significance of DNA adducts: *regulatory Toxicology and Pharmacology* 24, 1996 .

Savelle, K., King, L., **Gallagher, J.**, and Lewtas, J. (1995) ³²P-postlabeling and HPLC separation of DNA adducts formed by diesel exhaust extracts in vitro and in mouse skin and lung after topical treatment *Carcinogenesis* Vol 16 pp 2083-2089.

Izotti, A., S.Deflora, G.L. Petrilli, **J. Gallagher**, M. Rojas, K. Alexandrov, H. Bartsch, and J. Lewtas (1995). Cancer biomarkers in human atherosclerotic lesions: Detection of DNA adducts. *Cancer Epidemiology Biomarkers and Prevention* vol 4 105-110.